

WHAT IS CLAIMED IS:

1. An arc welder having: a rectifier circuit which rectifies
an alternating current to a direct current; an inverter circuit
5 which converts an output of said rectifier circuit to a
high-frequency alternating current; a transformer which
converts an output of said inverter circuit to a voltage suitable
for arc welding; a second rectifier circuit which rectifies
an output of said transformer to a direct current; and a first
10 reactor which is connected to said second rectifier circuit,
wherein

said arc welder comprises a current circuit which is
connected in parallel to said second rectifier circuit with
a reactance that is larger than a reactance of said first reactor.

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2. The arc welder according to claim 1, wherein said
reactance of said first reactor is 20 μ H (microhenries) or
smaller, and said reactance of said current circuit which is
connected in parallel to said second rectifier circuit is 100
20 μ H or larger.

3. The arc welder according to claim 1 or 2, wherein said
current circuit which is connected in parallel to said second
rectifier circuit comprises:

25 a current controlling circuit which controls a current;
a third rectifier circuit which rectifies said controlled
current; and

a second DC reactor which is connected to said third rectifier circuit.